

***Remarks***

Upon entry of the foregoing amendment, claims 10-11, 14, 17-18, 25-27, 30-36, and 39-42 are pending in the application, with claims 10, 25, and 32 being the independent claims. Claims 10, 25, 32, 35, and 41 have been amended to further define the invention, and claims 16, 19-24, and 37-38 have been canceled herein. These changes are believed to be supported by the specification and are not believed to add new matter. Therefore, it is respectfully requested that these amendments and additions be entered by the Examiner. Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections, and that they be withdrawn.

***Rejections Under 35 U.S.C. § 103***

Claims 10-11, 14, 17-18, 25-27, 30-36, and 39-42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,177,964 to Birleson (hereinafter "Birleson" ) in view of U.S. Patent No. 5,564,098 to Rodal (hereinafter "Rodal"), U.S. Patent No. 5,625,307 to Scheinberg (hereinafter "Scheinberg"), and "A 3 CHIP GaAs Double Conversion TV Tuner with 70 dB of Image Rejection" by Ducourant (hereinafter "Ducourant"). Applicants respectfully traverse this rejection.

Claim 10 has been amended so as to include *a first polyphase circuit disposed on the substrate that provides I and Q local oscillator signals for mixing in the second mixer; and a second polyphase circuit disposed on the substrate that combines I and Q output signals of the second mixer to complete the image rejection.*

Birleson does not teach or suggest first or second polyphase circuits disposed on the substrate, as recited in amended claim 10. Rodel, Scheinberg, and Ducourant also do not teach these features. Accordingly, the cited references do not teach each and every feature of amended claim 10, and therefore do not meet the requirements for prima facie obviousness. Accordingly, Applicant requests that the rejection under 35 U.S.C. 103(a) of independent claim 10 be removed and that this claim and its respective dependent claims be passed to allowance. Independent claims 25 and 32 have been similarly amended and are therefore allowable for at least the same reasons as claim 10. Accordingly, Applicants request that these independent claims and their respective dependent claims also be passed to allowance.

### ***Conclusion***

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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